

ing. Or if the cabin of a steamboat, of the capacity of a thousand or twelve hundred of these hogsheds and containing one hundred passengers were without ventilation, and were to receive no fresh air a similar effect would be produced on them all—on this account it is evident, that all rooms for sleeping and all public rooms churches, lecture rooms and halls for amusement containing a great number of persons, should be so situated and so constructed that there may be a continuous escape of foul air as of ingress of that which is pure.

I think after reading the above you will admit the necessity of pure air to sustain life, and I think Mr. Ruttan's plan is thorough and complete for procuring a sufficient supply for your house, the very life sustaining thing you many of you so carefully exclude from your dwellings.

Mr. R. has given to my house six square feet of outside air taken about 5 feet from the surface of the ground on the north side over which air duct I have full control letting in just as much as I require according to the weather warming the house in winter by passing through the furnace, and cooling it in summer.

Nearly all my friends that have seen the working of it say it is the best they have yet seen, beside it is so clean a way for warming a house, no wood to carry into nor ashes out excepting to the furnace which is in the cellar, and I have been enabled ever since it has been in operation to keep my house warmed to six or eight degrees above temperate with the one fire, although I provided the house with grates having little hopes that Mr. Ruttan could warm all my house (which is not a small one for a farm house) with the one fire.

Pray excuse haste and believe me to
remain yours truly

R. L. DENNISON.

P. S.—I should be most happy to show the working of the plan as produced in my house to any civil or respectable person.

R. L. D.

THE AGRICULTURE OF ANCIENT EGYPT.

The fertility of Egypt, it is well known, mainly depended upon the annual overflowing of the Nile. Egypt consists of a narrow valley, and the waters brought down from the higher countries are impregnated with highly fertilizing substances, which are left on the surface as a thick top-dressing. The husbandry of Egypt was exceedingly simple. It is thus described by one of the most celebrated ancient writers:—

"How easy," says Pliny, "is the Husbandry of Egypt. For there the river Nile, serving the

turn of a good ploughman, begins to swell and overflow at the first new moon after the summer solstice. He begins fair and gently, and so increases gradually: as long as the sun is in the sign Leo, he rises on to his full height: on entering into the sign Virgo, his fury slackens and he slowly decreases, until he resumes his wonted channel. It is always observed that if he rise not above twelve cubits high, the people are sure to have that year a scarcity; and they make their account for the same if he exceed the gauge of sixteen cubits; for the higher he rises, the longer he is before he is fallen again to his level. By which time the seed-time is past, and men cannot sow the ground in due season. It is generally understood to be their practice, that upon the subsidence of the deluge, they cast the seed upon the floated lands, and immediately after turn in their swine to trample it into the soil while moist. This, at any rate is certain, that as soon as the river is down, which mostly happens about the beginning of November, they sow their seed upon the slime and mud; which done, they go over it with the plough, turning it in with a light furrow. Some few then begin weeding the ground; but most of them, after sowing is finished, never step into the field again to see how it comes on, till they go in with the sickle at the end of March to reap it. By May-time the Harvest-home is sung, and all done for the year. In Lower Egypt the straw is never a cubit long; the reason being that the seed lies very dry, having no other nourishment or manure than the mud of the river; and there is nothing underneath but sand and gravel: but in Upper Egypt, about Thebes, they are far better farmers, and have better harvests, that part being, as indeed most of Egypt is, low and flat. * * * * The same Husbandry," he goes on to say, "is practised in Babylonia and Selucia, where the Euphrates and Tigris overflow their banks in like manner, but to better effect and greater profit, owing to the more general use of sluices and flood-gates. And in Syria they have small light ploughs, on purpose for making their shallow furrows and stitches; whereas, *with us in Italy*, in most places, eight oxen at least are required for one plough; and, indeed, to make any speed with it, they must work till they blow and pant again."

THE MOLE A SUB-CULTIVATOR.

Even your tiny mole is a ruthless beast of the field, to slugs, and snails, and caterpillars, and such land-sucking fry, a fierce sub-navigator in his way; but his track turns up some pretty cultivation; it only wants spreading, far and wide. It is not so wise to throttle him as you think. I grieve to see him hanging gibbeted, his clever paddles stopped by cruel ignorance. For he is your only granulation-master; he taught us drainage and sub-cultivation, and we shall learn of him another and a greater lesson, some day, and call him a prophet, when we've done hanging him and have got some speculation in our own eyes, whose sense is shut at present, instead of saying he can't see.—*Talpa: or the Chronicles of a Clay Farm.*